

CLAIMS

1. A wireless system for distributing a broadcast program around a building, comprising a distribution apparatus (110), at least one program receiving apparatus (160) and means (113, 162) for associating the at least one program receiving apparatus with the distribution apparatus, wherein the distribution apparatus comprises
 - 5 a receiver (111) for receiving a broadcast program from a broadcasting source and
 - 10 a wireless transmitter (113) for transmitting the received broadcast program, and wherein the program receiving apparatus comprises
 - 15 an interface (160b) for receiving an indication of a broadcast program to be received by the program receiving apparatus,
 - 20 a wireless receiver (162) for receiving the indicated broadcast program and
 - 25 an adaptation means (163) for adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus if the associated distribution apparatus has sufficient available transmission capacity to transmit the indicated broadcast program and otherwise adapting the program receiving apparatus to search for a non-associated distribution apparatus having available transmission capacity to transmit the indicated broadcast program.

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2. A wireless system as claimed in claim 1, wherein the adaptation means (163) for adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus comprises means (163) for adapting the program receiving apparatus to receive a current transmission of the indicated broadcast program from the associated distribution apparatus.

3. A wireless system as claimed in claim 1, wherein the adaptation means (163) for adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus comprises means (163, 162) for transmitting a request to the associated 5 distribution apparatus for transmission of the indicated broadcast program, and wherein the associated distribution apparatus further comprises means (112, 113) responsive to the request for transmitting the indicated broadcast program if transmission capacity is available.

10 4. A wireless system as claimed in claim 3, wherein the means (112, 113) responsive to the request for transmitting the indicated broadcast program if transmission capacity is available further comprises

means (112) for determining whether a current transmitted broadcast program is being transmitted to an associated program receiving apparatus 15 and

means (112) responsive to determining that the current transmitted broadcast program is being transmitted to no associated program receiving apparatus for replacing the current transmitted broadcast program by the indicated broadcast program.

20 5. A wireless system as claimed in any one of claims 1 to 4, wherein the means (162, 163) for adapting the program receiving apparatus to search for a non-associated distribution apparatus having available transmission capacity to transmit the indicated broadcast program comprises 25 means (162, 163) for searching for a non-associated distribution apparatus currently transmitting the indicated broadcast program.

30 6. A wireless system as claimed in any one of claims 1 to 4, wherein the means (162, 163) for adapting the program receiving apparatus to search for a non-associated distribution apparatus having available transmission capacity to transmit the indicated broadcast program comprises

means (162, 163) for requesting a non-associated distribution apparatus to transmit the indicated broadcast program.

7. A wireless system as claimed in any one of claims 1 to 6,
5 wherein the program receiving apparatus further comprises means (162, 163) for, when receiving the indicated program from a non-associated distribution apparatus, intermittently checking the availability of transmission capacity of the associated distribution apparatus for transmitting the indicated program, and wherein the adaptation of the program receiving apparatus to receive the
10 indicated broadcast program from the associated distribution apparatus is responsive to such capacity being available.

8. A method of operating a wireless system for distributing a broadcast program around a building and comprising a distribution apparatus
15 (110), at least one program receiving apparatus (160) and means (113, 162) for associating the at least one program receiving apparatus with the distribution apparatus, the method comprising at the program receiving apparatus:

receiving (160b) an indication of a broadcast program to be received by
20 the program receiving apparatus; and

adapting (162, 163) the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus if the distribution apparatus has available capacity for transmitting the indicated broadcast program, otherwise

25 adapting (162, 163) the program receiving apparatus to receive the indicated broadcast program from a non-associated distribution apparatus.

9. A method as claimed in claim 8, wherein adapting the program receiving apparatus to receive the indicated broadcast program from the
30 associated distribution apparatus comprises receiving (162) a current transmission of the indicated broadcast program from the associated distribution apparatus.

10. A method as claimed in claim 8, wherein adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus comprises transmitting (162) the request 5 requesting transmission of the indicated broadcast program, and at the distribution apparatus:

receiving (113) the request; and
determining (112) whether the distribution apparatus has available capacity for transmitting the indicated broadcast program, and
10 if the distribution apparatus has available capacity for transmitting the indicated broadcast program, receiving (111) and transmitting (112) the indicated broadcast program.

11. A method as claimed in claim 10, wherein determining whether 15 the distribution apparatus has available capacity for transmitting the indicated program comprises determining (112) whether a currently transmitted broadcast program is being transmitted to any associated program receiving apparatus and, in response to determining that a currently transmitted broadcast program is being transmitted to no associated program receiving 20 apparatus, replacing (112, 113) the currently transmitted broadcast program by the indicated broadcast program.

12. A method as claimed in any one of claims 8 to 10, wherein adapting the program receiving apparatus to receive the indicated broadcast 25 program from a non-associated distribution apparatus comprises receiving (162) a current transmission of the indicated broadcast program from the non-associated distribution apparatus.

13. A method as claimed in any one of claims 8 to 10, wherein adapting the program receiving apparatus to receive the indicated broadcast 30 program from a non-associated distribution apparatus comprises transmitting

(162, 163) a request for the non-associated distribution apparatus to transmit the indicated broadcast program.

14. A method as claimed in any one of claims 8 to 10, comprising at 5 the program reception apparatus discontinuing reception (162) of the indicated broadcast program from the non-associated distribution apparatus and commencing reception (162) of the indicated broadcast program from the associated distribution apparatus, in response to capacity for transmitting the indicated broadcast program becoming available at the associated distribution 10 apparatus.

15. A wireless distribution apparatus for distributing a broadcast program around a building to an associated program receiving apparatus, comprising

15 means (113) for receiving a request to transmit an indicated broadcast program,

means (112) responsive to the received request for determining whether a current transmitted broadcast program is being transmitted to an associated program receiving apparatus, and

20 means (112) responsive to determining that the current transmitted broadcast program is being transmitted to no associated program receiving apparatus for replacing (112) the current transmitted broadcast program by the indicated broadcast program.

25 16. A program receiving apparatus for receiving a broadcast program distributed around a building by an associated wireless distribution apparatus, comprising

an interface (160b) for receiving an indication of a broadcast program to be received by the program receiving apparatus,

30 a wireless receiver (162) for receiving the indicated broadcast program, and

an adaptation means (162, 163) for adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus if the associated distribution apparatus has sufficient available transmission capacity to transmit the indicated broadcast program
5 and otherwise adapting the program receiving apparatus to search for a non-associated distribution apparatus having available transmission capacity to transmit the indicated broadcast program.

17. A program receiving apparatus as claimed in claim 16, wherein
10 the adaptation means (162, 163) for adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus comprises means (162, 163) for adapting the program receiving apparatus to receive a current transmission of the indicated broadcast program from the associated distribution apparatus.

15 18. A program receiving apparatus as claimed in claim 16, wherein the adaptation means (162, 163) for adapting the program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus comprises means (162, 163) for transmitting a request to the
20 associated distribution apparatus for transmission of the indicated broadcast program.

19. A program receiving apparatus as claimed in claim 17 or 18, wherein the means (162, 163) for adapting the program receiving apparatus to
25 search for a non-associated distribution apparatus having available transmission capacity to transmit the indicated broadcast program comprises means (162, 163) for searching for a non-associated distribution apparatus currently transmitting the indicated broadcast program.

30 20. A program receiving apparatus as claimed in claim 17 or 18, wherein the means for adapting the program receiving apparatus to search for a non-associated distribution apparatus having available transmission capacity

to transmit the indicated broadcast program comprises means (162, 136) for requesting a non-associated distribution apparatus to transmit the indicated broadcast program.

5 21. A program receiving apparatus as claimed in claim 17 or 18, comprising means (162, 163) for, when receiving the indicated program from a non-associated distribution apparatus, intermittently checking the availability of transmission capacity of the associated distribution apparatus for transmitting the indicated program, and wherein the adaptation means for adapting the
10 program receiving apparatus to receive the indicated broadcast program from the associated distribution apparatus is responsive to such capacity being available.